



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,326	07/02/2001	Katsuaki Hamamoto	010848	6711
38834	7590	06/01/2005	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			ZHENG, EVA Y	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/895,326	HAMAMOTO, KATSUAKI	
	Examiner	Art Unit	
	Eva Yi Zheng	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-15 and 17-19 is/are allowed.
- 6) ☒ Claim(s) 16 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/2/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 16 and 20 are rejected under 35 U.S.C. 102(a) as being anticipated by applicant's prior art (AAPA).

a) Regarding claim 16, AAPA discloses a scrambling code generation apparatus (as shown in Fig. 16) generating a scrambling code used in a scrambling operation of transmission data, comprising:

a storage circuit storing predetermined initial values (22 in Fig. 16);

a logic circuit (shift register formed of registers 11, 12, 13 and 14) obtaining by a predetermined operation a matrix ([0042]-[0050]) to determine a value of each code forming said sequence of scrambling codes based on a predetermined generating polynomial ([0027] " $f(x) = X^4 + X^2 + 1$ "); and

an arithmetic circuit (21 in Fig. 16) multiplying said predetermined initial values stored in said storage circuit by said obtained matrix to compute a value of each code forming said sequence of scrambling codes ([0060]).

b) Regarding claim 20, AAPA discloses a portable radio terminal of digital radio communication, comprising:

a transmission related modem (inherent as base station) modulating transmission data ([0004]-[0014]); and

a radio processor applying processing for radio communication on transmission data of said transmission related modem to send out the processed data as a transmission radio signal ([0004]-[0014]),

said transmission related modem comprising a scrambling code generation apparatus generating a scrambling code used in a scrambling operation of said transmission data ([0014]),

said scrambling code generation apparatus (as shown in Fig. 16) comprising:

a storage circuit (22 in Fig. 16) storing predetermined initial values,

a logic circuit (shift register formed of registers 11,12,13 and 14) obtaining by a predetermined operation a matrix ([0042]-[0050]) to determine a value of each code forming said sequence of scrambling codes based on a predetermined generating polynomial ([0027] " $f(x) = X^4 + X^2 + 1$ "); and

an arithmetic circuit (21 in Fig. 16) multiplying said predetermined initial values stored in said storage circuit by said obtained matrix to compute a value of each code forming said sequence of scrambling codes ([0060]).

Allowable Subject Matter

3. Claims 13-15 and 17-19 are allowed.
4. The following is an examiner's statement of reasons for allowance:

None of the prior art teaches or suggest a scrambling code generator comprise a control circuit for controlling an arithmetic circuit and an input circuit so that the arithmetic circuit computes values of registers and the input circuit applies the computed values into the registers until all the plurality of stages of registers store the values based on the computed and input values. The shift register continues a shift operation based on valid values stored in all of the plurality of stages of registers to generate the sequence of scrambling codes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Yi Zheng whose telephone number is (571) 272-3049. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-879-9306.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Art Unit: 2634

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Eva Yi Zheng
Examiner
Art Unit 2634

May 23, 2005



**SHUWANG LIU
PRIMARY EXAMINER**